

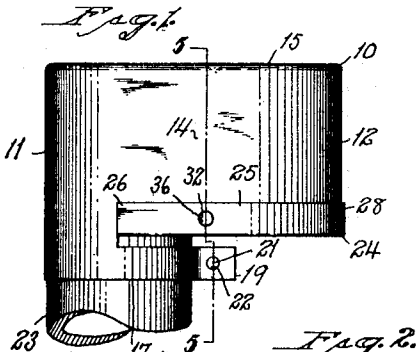
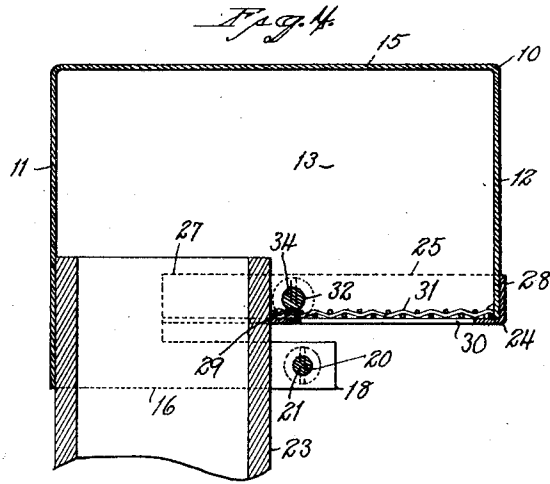
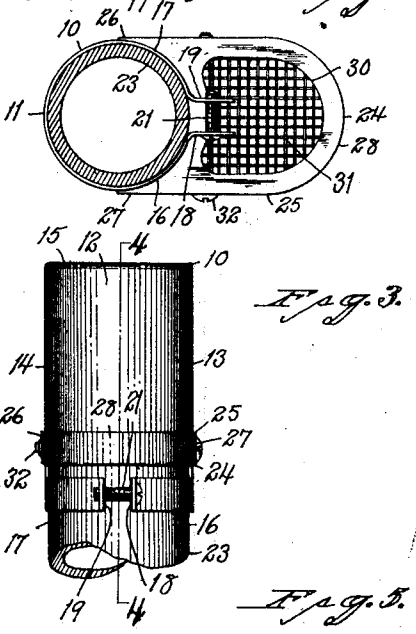
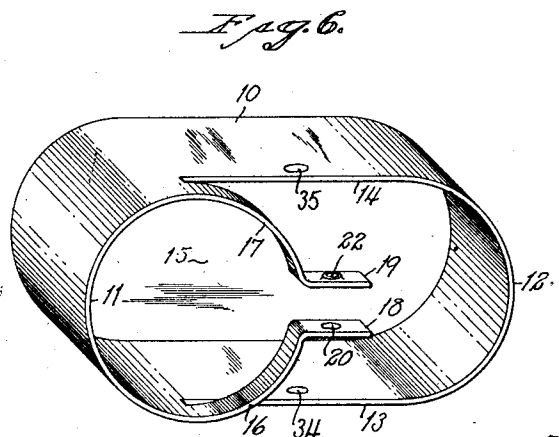
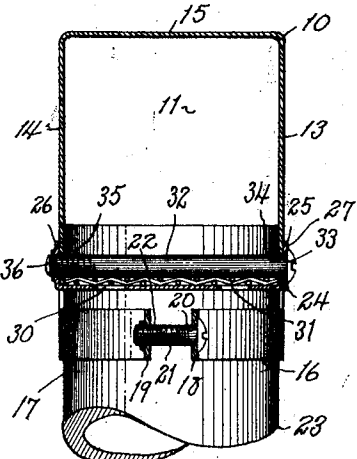
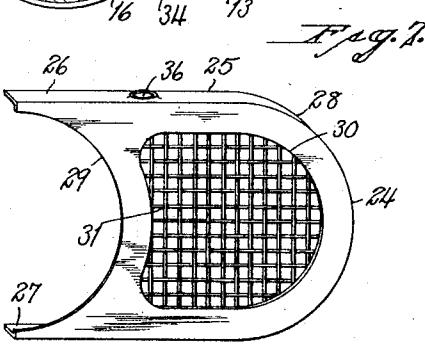
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VENT CAP FOR VENT PIPES, ETC

Filed Oct. 10, 1930



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UNITED STATES PATENT OFFICE

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VENT-CAP FOR VENT-PIPES, ETC.

Application filed October 10, 1930. Serial No. 487,897.

This invention relates to an improvement in vent- or breather-caps primarily designed as terminals for the vent-pipes of fuel-oil tanks but available for use in various situations where it is desirable to provide for the escape of fumes, for the inlet of air, or both.

The main object of this invention is to provide a simple, convenient and reliable cap of the type referred to constructed with particular reference to low cost for manufacture.

With the above and other objects in view as will appear from the following, my invention consists in a vent-cap having certain details of construction and combinations of parts as will be hereinafter described and particularly recited in the claims.

In the accompanying drawing:

Fig. 1 is a view in side elevation of a vent-cap constructed in accordance with my invention and shown as applied to the upper end of a vent-pipe;

Fig. 2 is an underside view thereof;

Fig. 3 is an edge view thereof;

Fig. 4 is a longitudinal sectional view taken on the line 4—4 of Fig. 3, but on a larger scale;

Fig. 5 is a transverse sectional view taken on the line 5—5 of Fig. 1, but on a larger scale;

Fig. 6 is a perspective view of the cup-shaped cap-member detached; and

Fig. 7 is a perspective view of the screen-frame and screen detached.

The particular vent-cap herein chosen for the illustration of my invention consists of an inverted drawn sheet-metal cup 10 having a pair of opposed hemicylindrical end-walls 11 and 12, complementary side-walls 13 and 14 and a top-wall 15, all integral as shown.

The lower edge of the end-wall 12 is coincident with the lower edge of the side walls 13 and 14, while the end-wall 11 is extended downward to a further degree and has projecting from its respective opposite edges a pair of complementary integral flexible clamping-arms 16 and 17 extending in the plane of the bottom edge of the cup and respectively terminating in outturned parallel fingers 18 and 19.

The finger 18 of the clamping-arm 16 is

formed with a perforation 20 for the free passage of a clamping-screw 21, the threaded end of which latter is screwed into a threaded perforation 22 in the complementary finger 17 of the clamping-arm 19.

The clamping-arms 16 and 17 above referred to are adapted to encircle and embrace, in combination with the adjacent hemicylindrical end-wall 11, the upper end of a vent-pipe 23 upon which the cap is rigidly mounted by tightening the clamping-screw 21.

For the purpose of preventing the ingress of insects or other foreign matter into the cap 10 through the open under-face of the front end thereof, I employ a sheet-metal screen-frame 24 having an upwardly-extending flange 25, the straight side-reach 26 of which bears against the outer face of the side-wall 14 of the cap at the lower edge thereof, while its complementary opposite straight reach 27 similarly bears against the outer face of the side-wall 13 of the cap. The semicircular reach 28 of the flange 25 connecting the reaches 26 and 27 thereof bears against the outer face of the end-wall 12 near the lower edge thereof, as clearly shown in Fig. 4 of the drawing.

The screen-frame 24 is provided in its inner edge with a semicircular notch 29 for the clearance of the vent-pipe 23 and in its body-portion with an air-passage 30, overlying which is a screen of metallic gauze 31 soldered or otherwise secured within the said frame.

To secure the screen-frame 24 in place upon the open under-face of the cap 10, I provide a long horizontal screw 32 extending through a perforation 33 in the straight reach 27 of the flange 25 through a perforation 34 in the side-wall 13 of the cap near its lower edge, through a corresponding perforation 35 in the side-wall 14 and into a threaded perforation 36 in the straight reach 26 of the flange 25 of the screen-frame 24. The screw 32 thus serves to securely hold the screen-frame in place and permits its ready removal for cleaning.

It will be understood by those skilled in the art that my invention may assume varied physical forms without departing from my inventive concept, and I, therefore, do not

limit myself to the specific embodiment herein chosen for illustration, but only as indicated in the appended claims.

I claim:

5 1. As a new article of manufacture, a vent-cap having a vent-pipe-receiving portion and an offset portion laterally projecting from the said vent-pipe-receiving portion; a pair of resilient clamping-arms integrally formed at
10 the lower end of the said vent-pipe-receiving portion and each having a screw-receiving terminal located beneath the said offset portion of the vent-cap in a plane below the lower edge of the latter; screw-means extend-
15 ing between the terminals of the said resilient clamping-arms for binding the same upon a vent-pipe; and a detachable screen-frame having an upstanding flange engaging the outer surface of the offset portion of the vent-
20 cap and interposed between the same and the complementary screw-receiving terminals of the said resilient clamping-arms.

2. As a new article of manufacture, a vent-cap having a body formed with a top wall, a
25 pair of oppositely disposed side walls and a pair of oppositely disposed hemi-cylindrical end walls, clamping means contiguous to and integral with one of said end walls for clamping the cap upon the open end of a
30 cylindrical vent-pipe in any radial orientation thereto, in combination with detachable flame-excluding means to fill the bottom of the body from the second end wall thereof to the vent-pipe, the said means being semicir-
35 cularly notched at one end thereof to abut against and partially embrace the said vent-pipe, and the said means having an aperture covered with metal gauze.

In testimony whereof, I have signed this
40 specification.

EDWARD S. CORNELL, JR.

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